

SACRAMENTO DISTRICT INSTRUCTIONS TO:
CEGS-15561

PART 1 GENERAL

After paragraph MAINTENANCE add:

SEISMIC RESTRAINTS

Seismic restraints for [piping] [and] [ductwork] [and] equipment] and associated appurtenances shall be specified in SECTION: SEISMIC PROTECTION FOR MECHANICAL, ELECTRICAL EQUIPMENT.

Structural steel required for reinforcement to properly support [piping] [and] [ductwork] [and] [equipment] and appurtenances, but not shown, shall be provided under this section. The material used for supports shall be as specified in SECTION: STRUCTURAL STEEL.

Justification for District change (3078, Design Deficiency Recommendation)

SD-92, Spare Parts Data - Add the following to the end of paragraph:

Also a list of the parts recommended by the manufacturer to be replaced after [one] [and] [three] year[s] of service shall be provided.

Justification for District change (1st Ind, SPDED-TE (30 Jul 71), subject: Location of Thermometers and Pressure Gauges to letter 30 Jul 71), PREHW, Reg CE, Western Region, S.F, CA)

PART 2 PRODUCTS

Fractional and Integral Horsepower

NOTE: Designer shall verify that at least 3 equipment manufacturers offer high efficiency motors for sizes used in this design. If not generally available, then delete

requirement for high efficiency motors for specific pieces of equipment that are not generally available with high efficiency motors.

All integral horsepower (1 HP and over) motors used over 2,000 hours per year shall be high efficiency type unless unavailable as mentioned above. Designer may delete requirements for high

-1-

efficiency motors that are used less than 2,000 hours per year if they are proven to be not cost effective per TM 5-811-13, STANDARD AND HIGH EFFICIENCY MOTORS AND CONTROLLERS.

If some or all motors in this section are to be high efficiency type, then reference table in SECTION AIR SUPPLY AND DISTRIBUTION SYSTEM (FOR (HEATING, VENTILATING AND AIR CONDITIONING) or insert Tables VI, VII and/or VIII from SECTION AIR SUPPLY AND DISTRIBUTION SYSTEM (FOR (HEATING, VENTILATING AND AIR CONDITIONING) at the end of this section. If some motors are to be standard efficiency and some are to be high efficiency, then indicate which motors are standard efficiency or high efficiency in the equipment schedule remarks column.

NOTE: Integral horsepower motors shall be high efficiency type and shall have nominal motor efficiencies as indicated [in SECTION AIR SUPPLY AND DISTRIBUTION SYSTEM (FOR HVAC SYSTEM in Table [1] [and] [_____] at the end of this section]. [Motors noted as standard efficiency in equipment schedule may be equipped with manufacturers standard motor.

Fuel Storage Tanks

NOTE: Delete 2nd sentence "Normally the capacity will be 6,000 gallons."and the word "However" in the following sentence and replace with Designer is to calculate minimum storage capacity per Architect Engineer Instructions, Chapter 14.

Justification for District change (Tanks to be sized per A-E Instructions, Chapter 14)

Last line - "intergrity" - should be "integrity". (Correction)

Tank Accessories - b. Fill Connection:

Add:

Fill line shall be installed in a spill containment sump as required by 40 CFR 280. Minimum capacity shall be five (5) gallons. Sump shall be rain tight and tight from high ground water conditions. Sump shall be [H-20, traffic]

-2-

[pedestrian] rated. Sump shall be equipped with an internal drain that will drain fuel from sump into fuel tank when drain valve is manually opened. Drain valve shall be brass construction and shall automatically close when operator releases operating lever. Drain valve shall be capable of draining five gallons of fuel in less than two (2) minutes. All components of sump shall be compatible with the fuels used.

f. First sentence - "Each tank shall be provided with a steel access ladder at each manhole." (This should be optional based on Base Engineers choice).

Add:

k. Tank shall be equipped with an overfill protection system in accordance with 40 CFR 280.20. Justification for District change (40 CFR 280.20 - Code of Federal Regulations)

Thermometers

Add the following to the end of paragraph:

On thermally insulated equipment or piping, stand-off mounting brackets, bases, adapters or extended tubes shall be provided. These items shall provide clearance not less than the thickness of the insulation. These stand-off mounting items shall be integral with the thermometer or standard accessories of the

manufacturer. Remote-type thermometers shall have sensing elements or thermal elements with capillaries, and for use in pipes shall have immersion sensing elements.

Justification for District change (1st Ind, SPDED-TE (30 Jul 71), subject: Location of Thermometers and Pressure Gauges to letter 30 Jul 71), PREHW, Reg CE, Western Region, S.F, CA)

PART 3 EXECUTION

Piping

Line 16 - Replace "Unless otherwise indicated, horizontal supply mains shall pitch down in the direction of flow with a grade of not less than 1 inch in 40 feet." with the following:

Unless otherwise indicated feed water, hot water supply and return mains shall pitch up in the direction of flow with a grade of not less than one inch in 40 feet, except where installed together they shall be pitched in the same direction. Eccentric reducers for steam systems shall be installed with the flat side on the bottom. Eccentric reducers for hot water systems shall be installed with the flat side on the top.

Justification for District change (Clarification)

-3-

Supports - General Delete 2nd note and paragraphs a. Seismic Requirements for Pipe Supports and Structural Bracing and paragraph b. Structural Attachments Justification for District change (3078, Design Deficiency Recommendation)

